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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/862,826  | 05/22/2001  | Isao Takeuchi        | SONYJP 3.0-783      | 8870             |
| 530 7590 04/02/2008<br>LERNER, DAVID, LITTENBERG,<br>KRUMHOLZ & MENTLIK<br>600 SOUTH AVENUE WEST<br>WESTFIELD, NJ 07090 |             |                      |                     |                  |
| EXAMINER<br>SHANG, ANNAN Q  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 2623  |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/862,826

**Applicant(s)**

TAKEUCHI, ISAO

**Examiner**

ANNAN Q. SHANG

**Art Unit**

2623

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 01/28/08 have been fully considered but they are not persuasive.

With respect to claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by **Igarashi et al (5,940,143)**, applicant discusses the claim limitations and the prior art of record and argues that, the prior art of record does not teach the claim limitation, i.e., "...an interference signal having a carrier frequency of a highest peak level, the interference signal mixed in the frequency bandwidth of said channel..."(see page 4+ of Applicant's Remarks)

In response, Examiner disagrees. Examiner notes applicant's arguments; however, Igarashi discloses suppressing interference mixed in the frequency bandwidth of the channel. Igarashi discloses that interference in the channel as a result of specific terrain of during a specific weather change (col.3, lines 64-67) and also interference which may be cause by the peripheral elements within the receiver. Igarashi teaches that the channel received at the receiver is mixed with interference signal and discloses a Limiter-180, which dynamically adjusts interference of a peak level or threshold and a PLL/Controller 130/220, which phase locks to the interference signal of the peak level and feeds the signal to a level adjuster IFAGC-100 as illustrated by the feedback loops (figs.1-3 and in col.7, lines 1-52, col.8, lines 30-40, col.9, lines 48-65 and col.11, lines 35+). Igarashi further discloses interference may occur between channels caused by broadcast having different levels such as high-definition TV signal and standard TV

signals transmitted simultaneously and also as a result of the peripheral elements within the receiver, when a desired channel is selected (col.3, line 64-67, col.6, line 22-27 and col.11, lines 35-52). Hence Applicant's arguments are not persuasive. The 102(b) rejection is proper, meets all the claim limitations and maintained as discussed below.

**This office action is made final.**

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by **Igarashi et al (5,940,143)**

As to claim 1, note the Igarashi reference figures 1-3, disclose high-definition TV signal receiving apparatus and gain control circuit and further discloses an interference reducing circuit comprising:

Receiving means (NTSC Receiver, col.5, lines 5, lines 3-17 and lines 44-58) which includes a signal processing circuit for tuning and demodulating a reception signal of a frequency bandwidth of a channel with interference signal having a carrier frequency of a highest peak level, the interference signal mixed in the frequency

bandwidth of the same channel (col.3, line 64-67, col.5, line 58-col.6, line 6, line 22-27 and col.11, lines 35-52);

Phase locking means (PLL/Controller 'PLL/C' 130/220) for attaining phase locking the interference signal of the highest peak level (col.5, lines 18-22 and col.6, lines 7-15), note Igarashi discloses a Limiter-180, which adjust the interference of a peak level or threshold (col.5, lines 23-35, col.6, lines 31-42, col.7, lines 1-52, col.8, lines 30-40, col.9, lines 48-65 and col.11, lines 35+)

Level adjusting means (IFAGC-100, col.7, line 53-col.8, line 6) for adjusting a level of a phase-locked signal that is output from the phase locking means to be equal to a level of the interference signal (col.8, lines 7-67 and col.10, line 60-col.11, line 52) and subtracted means (AGC Detector 200) for subtracting the level-adjusted phase-locked signal of the reception means (col.7, lines 31-63), note that besides suppressing interference between channels caused by broadcast having different levels such as high-definition TV signal and standard TV signals transmitted simultaneously, Igarashi further discloses suppressing interference in the same channel as a result of specific terrain of during a specific weather change and also interference cause by the peripheral elements within the receiver, when a desired channel is selected.

As to claim 4, Igarashi further discloses where the interference signal has an amplitude-modulated or frequency-modulated carrier and where a loop characteristic of the PLL means is set so as to follow the amplitude-modulated carrier or the frequency-modulated carrier (col.5, lines 36-65 and col.8, lines 6-40 and col.11, lines 35-52).

As to claim 5, the claimed "a TV broadcasting receiver, comprising..." is composed of the same structural elements that were discussed with respect to the rejection of can 1 above.

Claim 6 is met as previously discussed with respect to claim 4.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone

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number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative or access** to the automated information system, **call 800-786-9199 (IN USA OR CANADA) or 571-272-1000**.

/Annan Q Shang/  
Primary Examiner, Art Unit 2623

**Annan Q. Shang**